

A New Species of *Stereospermum* (Bignoniaceae) from Southern Viet Nam

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A new species of Bignoniaceae, *Stereospermum binhchauensis*, recently discovered in the Binh Chau - Phuoc Buu Nature Reserve of southern Viet Nam, is described and illustrated. *Stereospermum binhchauensis* is morphologically similar to *S. neuranthum* Kurz, but differs in having a longer inflorescence, 30–45 cm long and a yellowish purple, pubescent, longer corolla, 4–5 cm long. A key to the species of *Stereospermum* in Viet Nam is also provided.

Key words: Bignoniaceae, flora of Viet Nam, new species, *Stereospermum binhchauensis*, taxonomy

Stereospermum Cham., a genus of at least 20 species distributed from Africa and Madagascar to Southeast Asia (Callmander *et al.* 2012), can be recognized easily by flowers having a narrowly cylindrical corolla tube (Fig. 2F) and a cylindrical, pod-like fruit with a bony texture (Fig. 2I) and a seed chamber with alternating deep cavities (Fig. 2K) in which the seeds are seated (Schatz 2001). Until now, four species of *Stereospermum* have been recorded for Viet Nam (Pham 2000).

During field surveys in Binh Chau - Phuoc Buu Nature Reserve, Southern Viet Nam (Fig. 1) in 2013–2014, specimens of *Stereospermum* unlike any described species were collected. They differed significantly from the four Vietnamese species reported by Pham (2000) and Santisuk & Vidal (1985), and also differed from those from China (Zhang & Santisuk 1998) and Thailand (Santisuk 1987). Furthermore, they did not match specimens of *Stereospermum* in the Vietnamese herbaria of VNM and HN nor in the Muséum National d'Histoire Naturelle (P). Hence, the plants are described here as a new species, *S. binhchauensis*. *Stereospermum binhchauensis* is similar to *S. neuranthum* Kurz, but differs in having a longer inflorescence (30–45 cm versus 5–14

cm) and a pubescent, yellowish purple corolla (vs. glabrous and greenish white) 4–5 cm long (vs. 2.5–3.8 cm long).

Taxonomic treatment

***Stereospermum binhchauensis* V. S. Dang, sp. nov.** —Fig. 2

Typus. VIET NAM, Ba Ria - Vung Tau Province: Binh Chau - Phuoc Buu Nature Reserve, 60 km northeast of Vung Tau City, alt. 20 m, 47°83'67"N, 117°50'42"E, 18 July 2013, V. S. Dang 167 (holotype VNM, isotype HN).

Trees (Fig. 2A), 10–18 m tall. Twigs pubescent. Leaves (Fig. 2B) pinnately compound, 30–50 cm long; leaflets (Fig. 2C) 9–13, elliptic or elliptic-ovate, 8–18 × 5–7.5 cm, base rounded and oblique, margin entire, apex caudate to acuminate, abaxially densely puberulent, adaxially pubescent, lateral veins 7–9 on each side of midrib; petiolules 0.5–1 cm long. Inflorescences (Fig. 2D) cymose, terminal, 30–45 cm long; bracts and bractlets caducous. Calyx (Fig. 2E–H) campanulate, 0.8–1.2 cm long, purplish white, pubescent, with 5 triangular lobes. Corolla (Fig. 2F–G) yel-

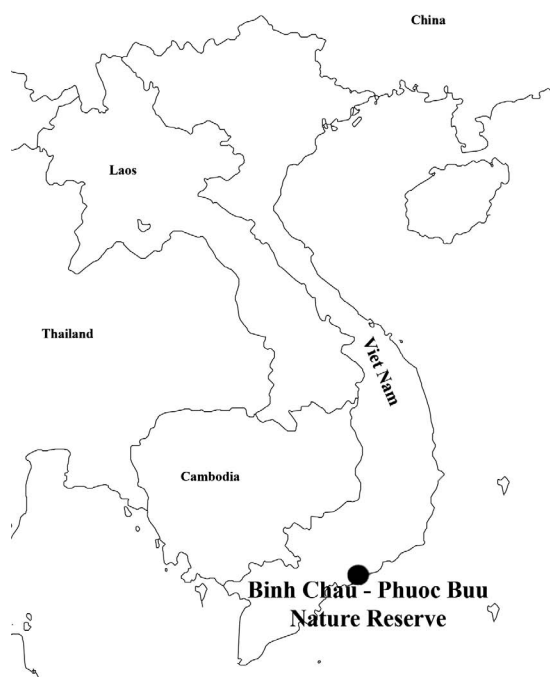


FIG. 1. Locality of Binh Chau - Phuoc Buu Nature Reserve, Viet Nam.

lowish purple, 4–5 cm long, pubescent; base of tube narrow cylindrical, apically widening to tubular-campanulate, curved slightly near apex, striate; lobes crisped, pale purple internally. Stamens (Fig. 2G) 4, didynamous, epipetalous, 1.5–2 cm long; filaments shortly exerted, pale yellow, sparsely hairy at base; anthers 0.1–0.2 × 0.5–0.7 cm, yellow, glabrous. Ovary (Fig. 2H) quadrangular, 0.1–0.2 cm long, ca 0.6 cm in diam. at cen-

ter, green; style 4–4.5 cm long, light yellowish green, sparsely hairy at base. Capsules (Fig. 2I–J) slender, terete, to 60–80 × 0.5–1 cm, curved, slightly 4-angular, green with white spots, pendulous. Seeds (Fig. 2K) many, 2–3 × 0.5–0.8 cm, winged. Flowering: February – March; fruiting: April – July.

Ecology. *Stereospermum binhchauensis* is scattered in semi-deciduous forests, on formerly cultivated land and sometimes along rivers and streams. It often grows in association with *Parrinari annamensis*, *Neonauclea sessilifolia*, *Sauropus bacciformis*, *Gardenia philastreii*, *Syzygium cinereum*, *Gmelina asiatica*, *Eupatorium odoratum*, *Eurycoma longifolia* and *Leonotis nepetifolia*.

Distribution. *Stereospermum binhchauensis* is known only from a very restricted area of about 10 hectares in the Binh Chau - Phuoc Buu Nature Reserve of Ba Ria-Vung Tau Province (Southern Viet Nam), at an elevation of about 20 m.

Other specimens examined. VIET NAM. Ba Ria - Vung Tau Province: Binh Chau - Phuoc Buu Nature Reserve, 60 km northeast of Vung Tau City, alt. 20 m, 47°83'69"N, 117°50'45"E, 27 March 2014, V. S. Dang 167a (VNM).

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Key to the species of *Stereospermum* of Viet Nam

- 1a. Calyx tubular to campanulate; corolla funnel shaped, tube long cylindrical, much exceeding calyx; stamens glabrous at base 2
- 1b. Calyx campanulate; corolla tubular to campanulate, suddenly merge into a very short cylindrical tube concealed by calyx; stamens hairy at base 3
- 2a. Calyx tubular, 1.7–2.2 cm long, ribbed *S. cylindricum*
- 2b. Calyx campanulate, 0.8–1 cm long, not ribbed *S. annamense*
- 3a. Capsule clearly quadrangular, with 4 prominent ridges; leaflets glabrous *S. colais*
- 3b. Capsule scarcely quadrangular, with 4 faintly raised angles; leaflets pubescent 4
- 4a. Corolla greenish white, 2.5–3.8 cm long, glabrous; inflorescences 5–14 cm long *S. neuranthum*
- 4b. Corolla yellowish purple, 4–5 cm long, pubescent; inflorescences 30–45 cm long .. *S. binhchauensis*

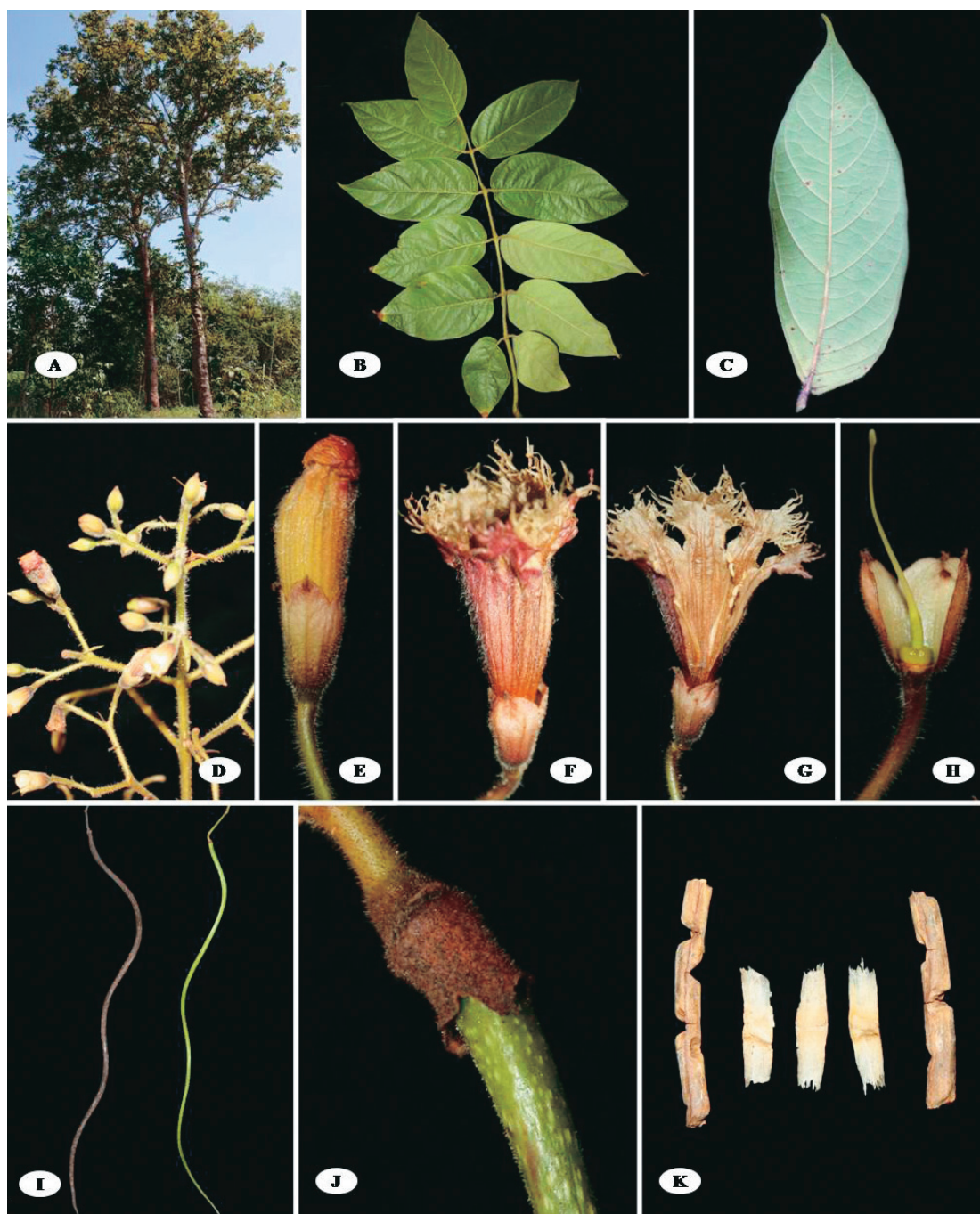


FIG. 2. *Stereospermum binhchauensis*. A, habit; B, pinnately compound leaf; C, leaflet; D, inflorescence; E, flower bud; F, flower; G, dissected flower showing stamens and inner corolla surface; H, dissected flower showing pistil and calyx; I, young and dry fruits; J, basal part of young fruit with remnant calyx and white spots; K, three winged seeds flanked by two septum fragments.

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